

ABSTRACT

A film structure for absorbing electromagnetic wave and manufacturing method thereof is provided. The multilayer film structure is composed of a plurality of polymer films and a plurality of permeability films. The polymer films have a multi-film stacking structure and the polymer films are composed of a carbon group compound structure. The permeability films are formed on each surface of the polymer films. Thus, every neighboring permeability films will have magnetic moments in opposite direction, and all the emitted electromagnetic waves will be cancelled by the permeability films, or be reflected in any one of the polymer films until the energies of the electromagnetic waves are consumed, or be absorbed by the carbon group compound structure and be transferred into thermal energy.